IN THE CLAIMS:

Please amend claims 8, 20, 26, 35 and 38 and cancel claims 9-11, 21-23, 29-31, 46 and 48 without prejudice as follows:

1-7. (Canceled)

8. (Currently amended) A method for terminating two or more constituent encoders of a turbo encoder employing a turbo code, the method comprising:

generating tail input bits at each of two or more constituent encoders by deriving the tail input bits from each of the two or more constituent encoders separately for each constituent encoder from contents of shift registers within each of the two or more constituent encoders, after an encoding of information bits by the two or more constituent encoders;

transmitting tail output bits from a first X(t) output branch and from a second $Y_0(t)$ output branch during trellis termination of a first of the two or more constituent encoders; ~~and~~

transmitting tail output bits from a third X'(t) output branch and from a fourth $Y_0'(t)$ output branch during trellis termination of a second of the two or more constituent encoders; and

puncturing one or more tail output bits such that 1/R tail output bits are transmitted for each of a plurality of trellis branches, wherein R is a turbo code rate employed by the turbo encoder during an information bit transmission.

9-14. (Canceled)

15. (Previously Presented) A method for terminating two or more constituent encoders of a turbo encoder employing a turbo code, the method comprising:

generating tail input bits at each of two or more constituent encoders by deriving the tail input bits from each of the two or more constituent encoders separately for each constituent encoder from contents of shift registers within each of the two or more constituent encoders, after an encoding of information bits by the two or more constituent encoders; and

transmitting tail output bits from certain output branches of said two or more constituent encoders during trellis termination of said two or more constituent encoders, wherein:

when the turbo encoder is employed as a rate 1/3 turbo encoder, said transmitting comprises:

transmitting tail output bits from a first X(t) output branch, and a second $Y_0(t)$ output branch, during trellis termination of a first of the two or more constituent encoders;

re-transmitting tail output bits from the first X(t) output branch during trellis termination of the first of the two or more constituent encoders;

transmitting tail output bits from a third X'(t) output branch and from a fourth $Y_0'(t)$ output branch, during trellis termination of a second of the two or more constituent encoders; and

re-transmitting tail output bits from the third X'(t) output branch during trellis termination of the second of the two or more constituent encoders.

16. (Previously Presented) A method for terminating two or more constituent encoders of a turbo encoder employing a turbo code, the method comprising:

generating tail input bits at each of two or more constituent encoders by deriving the tail input bits from each of the two or more constituent encoders separately for each constituent encoder from contents of shift registers within each of the two or more constituent encoders, after an encoding of information bits by the two or more constituent encoders; and

transmitting tail output bits from certain output branches of said two or more constituent encoders during trellis termination of said two or more constituent encoders, wherein:

when the turbo encoder is employed as a rate 1/4 turbo encoder, said transmitting comprises:

transmitting tail output bits from a first X(t) output branch, a second $Y_0(t)$ output branch, and a third $Y_1(t)$ output branch during trellis termination of a first of the two or more constituent encoders;

re-transmitting tail output bits from the first X(t) output branch during trellis termination of the first of the two or more constituent encoders;

transmitting tail output bits from a fourth X'(t) output branch, a fifth $Y_0'(t)$ output branch, and a sixth $Y_1'(t)$ output branch during trellis termination of a second of the two or more constituent encoders; and

re-transmitting tail output bits from the fourth X'(t) output branch during trellis termination of the second of the two or more constituent encoders.

17. (Previously Presented) A method as claimed in claim 15, wherein:

said generating is performed simultaneously at each of the two or more constituent encoders, wherein tail input bits from a first constituent encoder are generated in the same clock cycles as tail input bits are generated from a second constituent encoder.

18. (Previously Presented) A method as claimed in claim 15, wherein:

said generating is performed consecutively at each of the two or more constituent encoders, wherein tail input bits from a first constituent encoder are generated at different clock cycles than tail input bits from a second constituent encoder.

19. (Previously Presented) A method as claimed in claim 15, wherein said generating includes:

puncturing one or more tail output bits such that 1/R tail output bits are transmitted for each of a plurality of trellis branches, wherein R is a turbo code rate employed by the turbo encoder during an information bit transmission.

20. (Currently amended) A system for terminating two or more constituent encoders of a turbo encoder employing a turbo code, the system comprising:

a generator, adapted to generate tail input bits at each of two or more constituent encoders by deriving the tail input bits from each of the two or more constituent encoders separately for each constituent encoder from contents of shift registers within each of the two or more constituent encoders, after an encoding of information bits by the two or more constituent encoders;

a transmitter, adapted to transmit tail output bits from a first X(t) output branch and from a second $Y_0(t)$ output branch during trellis termination of a first of the two or more constituent encoders, and to transmit tail output bits from a third X'(t) output branch and from a fourth $Y_0'(t)$ output branch during trellis termination of a second of the two or more constituent encoders; and

a puncturer, adapted to puncture one or more tail output bits such that 1/R tail output bits are transmitted for each of a plurality of trellis branches, wherein R is a turbo code rate employed by the turbo encoder during an information bit transmission.

21-25. (Canceled)

26. (Currently amended) A system for terminating two or more constituent encoders of a turbo encoder employing a turbo code, the system comprising:

a generator, adapted to generate tail input bits at each of two or more constituent encoders by deriving the tail input bits from each of the two or more constituent encoders separately for each constituent encoder from contents of shift registers within each of the two or more constituent encoders, after an encoding of information bits by the two or more constituent encoders;

a puncturer, adapted to puncture one or more tail output bits such that 1/R tail output bits are transmitted for each of a plurality of trellis branches, wherein R is a turbo code rate employed by the turbo encoder during an information bit transmission; and

a transmitter, adapted to transmit tail output bits from certain output branches of said two or more constituent encoders during trellis termination of said two or more constituent encoders, wherein said transmitter is adapted to perform the following operations:

transmitting tail output bits from a first X(t) output branch and from a second $Y_0(t)$ output branch during trellis termination of a first of the two or more constituent encoders; and

transmitting tail output bits from a third X'(t) output branch and from a fourth $Y_0'(t)$ output branch during trellis termination of a second of the two or more constituent encoders.

27. (Previously Presented) A system for terminating two or more constituent encoders of a turbo encoder employing a turbo code, the system comprising:

a generator, adapted to generate tail input bits at each of two or more constituent encoders by deriving the tail input bits from each of the two or more constituent encoders separately for each constituent encoder from contents of shift registers within each of the two or more constituent encoders, after an encoding of information bits by the two or more constituent encoders; and

a transmitter, adapted to transmit tail output bits from certain output branches of said two or more constituent encoders during trellis termination of said two or more constituent encoders, wherein:

when the turbo encoder is employed as a rate 1/3 turbo encoder, said transmitter is adapted to perform the following operations:

transmitting tail output bits from a first X(t) output branch, and a second $Y_0(t)$ output branch, during trellis termination of a first of the two or more constituent encoders;

re-transmitting tail output bits from the first X(t) output branch during trellis termination of the first of the two or more constituent encoders;

transmitting tail output bits from a third X'(t) output branch and from a fourth $Y_0'(t)$ output branch, during trellis termination of a second of the two or more constituent encoders; and

re-transmitting tail output bits from the third X'(t) output branch during trellis termination of the second of the two or more constituent encoders.

28. (Previously Presented) A system for terminating two or more constituent encoders of a turbo encoder employing a turbo code, the system comprising:

a generator, adapted to generate tail input bits at each of two or more constituent encoders by deriving the tail input bits from each of the two or more constituent encoders separately for each constituent encoder from contents of shift registers within each of the two or more constituent encoders, after an encoding of information bits by the two or more constituent encoders; and

a transmitter, adapted to transmit tail output bits from certain output branches of said two or more constituent encoders during trellis termination of said two or more constituent encoders, wherein:

when the turbo encoder is employed as a rate 1/4 turbo encoder, said transmitter performs the following operations:

transmitting tail output bits from a first X(t) output branch, a second $Y_0(t)$ output branch, and a third $Y_1(t)$ output branch during trellis termination of a first of the two or more constituent encoders;

re-transmitting tail output bits from the first X(t) output branch during trellis termination of the first of the two or more constituent encoders;

transmitting tail output bits from a fourth X'(t) output branch, a fifth $Y_0'(t)$ output branch, and a sixth $Y_1'(t)$ output branch during trellis termination of a second of the two or more constituent encoders; and

re-transmitting tail output bits from the fourth X'(t) output branch during trellis termination of the second of the two or more constituent encoders.

29-31. (Canceled)

32. (Previously Presented) A method as claimed in claim 17, wherein:

said generating is performed simultaneously at each of the two or more constituent encoders, wherein tail input bits from a first constituent encoder are generated in the same clock cycles as tail input bits are generated from a second constituent encoder.

33. (Previously Presented) A method as claimed in claim 17, wherein:

said generating is performed consecutively at each of the two or more constituent encoders, wherein tail input bits from a first constituent encoder are generated at different clock cycles than tail input bits from a second constituent encoder.

34. (Previously Presented) A method as claimed in claim 17, wherein said generating includes:

puncturing one or more tail output bits such that 1/R tail output bits are transmitted for each of a plurality of trellis branches, wherein R is a turbo code rate employed by the turbo encoder during an information bit transmission.

35. (Currently amended) A system as claimed in claim 27, wherein:

said generator is adapted to perform said generating ~~is performed~~ simultaneously at each of the two or more constituent encoders, wherein tail input bits from a first constituent encoder are generated in the same clock cycles as tail input bits are generated from a second constituent encoder.

36. (Previously Presented) A system as claimed in claim 27, wherein:

said generator is adapted to perform said generating consecutively at each of the two or more constituent encoders, wherein tail input bits from a first constituent encoder are generated at different clock cycles than tail input bits from a second constituent encoder.

37. (Previously Presented) A system as claimed in claim 27, wherein said generator includes:

a puncturer, adapted to puncture one or more tail output bits such that 1/R tail output bits are transmitted for each of a plurality of trellis branches, wherein R is a turbo code rate employed by the turbo encoder during an information bit transmission.

38. (Currently amended) A system as claimed in claim 28, wherein:

said generator is adapted to perform said generating ~~is performed~~ simultaneously at each of the two or more constituent encoders, wherein tail input bits from a first constituent encoder are generated in the same clock cycles as tail input bits are generated from a second constituent encoder.

39. (Previously Presented) A system as claimed in claim 28, wherein:

said generator is adapted to perform said generating consecutively at each of the two or more constituent encoders, wherein tail input bits from a first constituent encoder are generated at different clock cycles than tail input bits from a second constituent encoder.

40. (Previously Presented) A system as claimed in claim 28, wherein said generator includes:

a puncturer, adapted to puncture one or more tail output bits such that 1/R tail output bits are transmitted for each of a plurality of trellis branches, wherein R is a turbo code rate employed by the turbo encoder during an information bit transmission.

41. (Previously Presented) A method for terminating two or more constituent encoders of a turbo encoder employing a turbo code, the method comprising:

using the tail input bits from at least one of the two or more constituent encoders after encoding information bits by the two or more constituent encoders; and

generating (nx2)/R tail output bits, n being a number of shift registers in each constituent encoder and R being a turbo code rate, wherein a first subset of said (nx2)/R tail output bits are generated by clocking the first constituent encoder n times with its switch in a down position while the second constituent encoder is not clocked, and a second subset of said (nx2)/R tail output bits are generated by clocking the second constituent encoder n times with its switch in the down position while the first constituent encoder is not clocked.

42. (Previously Presented) A method of claim 41, wherein said generating includes:

puncturing one or more tail output bits such that 1/R tail output bits are transmitted for each of a plurality of trellis branches.

43. (Previously Presented) A method of claim 41, wherein said generating includes: puncturing one or more tail output bits as follows:

Rate	1/2	1/3	1/4
X(t)	111 000	111 000 Repeat	111 000 Repeat
$Y_0(t)$	111 000	111 000	111 000
$Y_1(t)$	000 000	000 000	111 000
$\tilde{X}(t)$	000 111	000 111 Repeat	000 111 Repeat
$\tilde{Y}_0(t)$	000 111	000 111	000 111
$\tilde{Y}_1(t)$	000 000	000 000	000 111

44. (Previously Presented) A method for generating tail output bits to terminate two or more constituent encoders of a turbo encoder employing a turbo code, the method comprising:

using the tail input bits from at least one of the two or more constituent encoders after encoding information bits by the two or more constituent encoders;

generating tail output bits using the tail input bits, wherein R is a turbo code rate; and

puncturing one or more tail output bits such that 1/R tail output bits are transmitted for each of a plurality of trellis branches.

45. (Previously Presented) A method of claim 44, wherein puncturing one or more tail output bits is as follows:

Rate	1/2	1/3	1/4
X(t)	111 000	111 000 Repeat	111 000 Repeat
$Y_0(t)$	111 000	111 000	111 000
$Y_1(t)$	000 000	000 000	111 000
$\tilde{X}(t)$	000 111	000 111 Repeat	000 111 Repeat
$\tilde{Y}_0(t)$	000 111	000 111	000 111
$\tilde{Y}_1(t)$	000 000	000 000	000 111

46. (Canceled)

47. (Previously Presented) A wireless telephony apparatus to provide forward error correctable data and operable with a base telephony system to communicate data, the apparatus comprising:

a processor for segmenting data into a data block having a predetermined length;

a turbo code encoder in data communication with the processor for processing the data block, the turbo code encoder comprising two or more constituent encoders, wherein to terminate the data block tail input bits from at least one of the two or more constituent encoders are used after encoding information bits by the two or more constituent encoders, and generating (nx2)/R tail output bits, n being a number of shift registers in each constituent encoder and R being a turbo code rate, wherein a first subset of said (nx2)/R tail output bits are generated by clocking the first constituent encoder n times with its switch in a down position while the second constituent encoder is not clocked, and a second subset of said (nx2)/R tail output bits are generated by clocking the second constituent encoder n times with its switch in the down position while the first constituent encoder is not clocked;

a channel interleaver in data communication with the turbo code encoder to interleave data; and

a transmitter for transmitting interleaved data through an antenna.

48. (Canceled)